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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,628	11/01/2001	Christopher Richard Doerr	58	3837

7590 12/17/2003

Docket Administrator
(Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Road
Holmdel, NJ 07733-3030

EXAMINER	
KIM, ELLEN E	

ART UNIT	PAPER NUMBER
2874	

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/035,628	DOERR, CHRISTOPHER RICHARD	
	Examiner	Art Unit	
	Ellen E Kim	2874	

-- *The MAILING DATE of this communication appears on th cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 October 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,9-11 and 13-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7,9-11 and 13-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

This action is responsive to Applicant's amendment filed on 10/9/03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 7, 9, 10, 11, 13, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendez et al as applied to claim1 above, and further in view of Weaver [USPAT 5,524,155].

Mendez et al discloses every aspect of claimed invention except for the plurality of shutters.

Weaver discloses a demultiplexer comprising plurality of shutters.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Mendez et al's device to include the plurality of shutters for the purpose of blocking certain signal components as shown in Weaver's reference.

In re claims 2, 11, and 13, Mendez et al disclose the claimed invention except for the relocation of the switches so that the waveguides are crossing each other. It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Mendez et al's device to make the waveguides being cross each other, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse, 86 USPQ 70.*

In re claim 11, Mendez et al teach at column 4, lines 27-33 that silica substrate is utilized.

In re claims 7 and 18, Mendez et al discloses every aspect of claimed invention except for the N x N waveguide grating router coupled to the multiplexer.

Official Notice is taken that utilizing N x N waveguide grating router for delaying the transmitted light signal in the optical communication system is old and well known in the art. See In Re Malcolm 1942 C.D. 589:543 O.G. 440 MPEP 706.02 (a).

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify the Mendez et al's device to be coupled to the N x N WGR for the purpose of delaying the signal transmitted.

Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendez et al as applied to claim1 above, and further in view of Okawa et al [USPAT 6,069,990].

Mendez et al disclose every aspect of claimed invention except for the WGR.

Okawa et al disclose WGR multiplexer and WGR demultiplexer.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to include the WGR demultiplexer and the WGR multiplexer for the purpose of broadening the transmission band and reducing the loss [abstract].

Claims 5-6, and 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mendez et al as applied to claim 1 above, and further in view of Ueda [USPAT 6,163,633].

Mendez et al discloses every aspect of claimed invention except for the Mach-zehnder switch, which is, activated thermooptically.

Ueda disclose optical waveguide switch comprising a Mach-Zehnder interferometer circuit, which is, activated thermooptically.

It would have been obvious to the ordinary skilled person in the art at the time the invention was made to include the Mach-Zehnder interferometer switch which is activated thermooptically for the purpose of lower power consumption, low extinction ratio, and low crosstalk [abstract].

Response to Arguments

Applicant argues that Weaver discloses not the multiplexer, which uses shutters, but rather a demultiplexer, which uses shutters. Also argues that Weaver's shutters are not used to "block undesired crosstalk signals into the multiplexers", but rather are used to select a desired light signal from a multiplxer.

Examiner does not agree with Applicant's argument because Examiner uses the general teaching of utilizing of shutters in the optical device as shown in Weaver. Weaver clearly

teaches the utilization of shutters in the optical device, especially in demultiplexer. It is also noted that the newly added limitation, "... to block undesired crosstalk signals into said multiplexers." is considered as an intended use of the device. As long as the shutters in the Weaver's reference are blocking or passing some signals, it is clear that the shutters would inherently block some undesired crosstalk signals of the device.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. Ex parte Masham, 2 USPQ2d 1647 (1987).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Further references of interest are cited on Form PLO-892, which is attachment to this office action.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen Kim whose telephone number is (703) 308-4946. The examiner can normally be reached on Monday and Thursday.

Ellen E. Kim
Primary Examiner
December 8, 2003/EK